Welcome to STN International! Enter x:x

LOGINID: SSSPTA1648BQL

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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Welcome to STN International
NEWS
                 Web Page for STN Seminar Schedule - N. America
NEWS
        AUG 06
                 CAS REGISTRY enhanced with new experimental property tags
NEWS
         AUG 06
                 FSTA enhanced with new thesaurus edition
                 CA/CAplus enhanced with additional kind codes for granted
NEWS
         AUG 13
                 patents
                 CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS
         AUG 20
                 Full-text patent databases enhanced with predefined
NEWS 6
         AUG 27
                 patent family display formats from INPADOCDB
NEWS
         AUG 27
                 USPATOLD now available on STN
     7
NEWS 8
         AUG 28
                 CAS REGISTRY enhanced with additional experimental
                 spectral property data
         SEP 07
                 STN AnaVist, Version 2.0, now available with Derwent
NEWS
                 World Patents Index
NEWS 10
                 FORIS renamed to SOFIS
         SEP 13
NEWS 11
         SEP 13
                 INPADOCDB enhanced with monthly SDI frequency
NEWS 12
         SEP 17
                 CA/CAplus enhanced with printed CA page images from
                 1967-1998
                 CAplus coverage extended to include traditional medicine
NEWS 13
         SEP 17
                 patents
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 14
         SEP 24
                 CA/CAplus enhanced with pre-1907 records from Chemisches
NEWS 15
         OCT 02
                 Zentralblatt
         OCT 19
                 BEILSTEIN updated with new compounds
NEWS 16
         NOV 15
                 Derwent Indian patent publication number format enhanced
NEWS 17
         NOV 19
                 WPIX enhanced with XML display format
NEWS 18
         NOV 30
NEWS 19
                 ICSD reloaded with enhancements
         DEC 04
                 LINPADOCDB now available on STN
NEWS 20
         DEC 14
                 BEILSTEIN pricing structure to change
NEWS 21
         DEC 17
NEWS 22
                 USPATOLD added to additional database clusters
                 IMSDRUGCONF removed from database clusters and STN
NEWS 23
         DEC 17
         DEC 17
                 DGENE now includes more than 10 million sequences
NEWS 24
NEWS 25
         DEC 17
                 TOXCENTER enhanced with 2008 MeSH vocabulary in
                 MEDLINE segment
NEWS 26
         DEC 17
                 MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
                 CA/CAplus enhanced with new custom IPC display formats
NEWS 27
         DEC 17
                 STN Viewer enhanced with full-text patent content
NEWS 28
         DEC 17
                 from USPATOLD
NEWS 29
         JAN 02
                 STN pricing information for 2008 now available
NEWS 30
         JAN 16
                 CAS patent coverage enhanced to include exemplified
                 prophetic substances
NEWS 31
         JAN 28
                 USPATFULL, USPAT2, and USPATOLD enhanced with new
                 custom IPC display formats
NEWS 32
         JAN 28
                 MARPAT searching enhanced
NEWS 33
         JAN 28
                 USGENE now provides USPTO sequence data within 3 days
                 of publication
                 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 34
         JAN 28
                 MEDLINE and LMEDLINE reloaded with enhancements
NEWS 35 JAN 28
```

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS LOGIN Welcome Banner and News Items

NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 09:23:51 ON 04 FEB 2008

=> Washing (1) buffer
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Some commands only work in certain files. For example, the EXPAND
command can only be used to look at the index in a file which has an
index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
commands which can be used in this file.

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.63 0.63

FULL ESTIMATED COST

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FILE COVERS 1907 - 4 Feb 2008 VOL 148 ISS 6 FILE LAST UPDATED: 3 Feb 2008 (20080203/ED)

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http://www.cas.org/infopolicy.html

=> Tris

L1 131062 TRIS

=> pH9

L2 144 PH9

=> pH10

```
L3
           119 PH10
=> L1 and L2
             9 L1 AND L2
L4
=> L1 and L3
L5
            2 L1 AND L3
=> BSA
         17957 BSA
            87 BSAS
         18005 BSA
L6
                 (BSA OR BSAS)
=> L6 and L4
             1 L6 AND L4
L7
=> D L7 IBIIB ABS
'IBIIB' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'
The following are valid formats:
ABS ----- GI and AB
ALL ----- BIB, AB, IND, RE
APPS ----- AI, PRAI
BIB ----- AN, plus Bibliographic Data and PI table (default)
CAN ----- List of CA abstract numbers without answer numbers
CBIB ----- AN, plus Compressed Bibliographic Data
CLASS ----- IPC, NCL, ECLA, FTERM
DALL ----- ALL, delimited (end of each field identified)
DMAX ----- MAX, delimited for post-processing
FAM ----- AN, PI and PRAI in table, plus Patent Family data
FBIB ----- AN, BIB, plus Patent FAM
IND ----- Indexing data
IPC ----- International Patent Classifications
MAX ----- ALL, plus Patent FAM, RE
PATS ----- PI, SO
SAM ----- CC, SX, TI, ST, IT
SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB, CLASS
IABS ----- ABS, indented with text labels
IALL ----- ALL, indented with text labels IBIB ----- BIB, indented with text labels
IMAX ----- MAX, indented with text labels
ISTD ----- STD, indented with text labels
OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels
SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations
HIT ----- Fields containing hit terms
HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ----- HIT RN and its text modification
HITSTR ----- HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ----- HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ---- First HIT RN, its text modification, its CA index name, and
```

its structure diagram

FHITSEQ ---- First HIT RN, its text modification, its CA index name, its

structure diagram, plus NTE and SEQ fields

KWIC ----- Hit term plus 20 words on either side

OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI, AU; BIB, ST; TI, IND; TI, SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number. ENTER DISPLAY FORMAT (BIB): IBIB

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1057873 CAPLUS

TITLE:

Establishment of ISSR reaction system of Sargentodoxa

cuneata

AUTHOR(S):

Cai, Yan-lin; Jin, Ze-xin; Li, Jun-min

CORPORATE SOURCE:

College of Life Science, Hangzhou Normal University,

Hangzhou, 310018, Peop. Rep. China

SOURCE:

Jiangxi Nongye Daxue Xuebao (2006), 28(4), 583-586

CODEN: JNXUEV; ISSN: 1000-2286

PUBLISHER:

Jiangxi Nongye Daxue Xuebao Bianjibu

DOCUMENT TYPE:

Journal

LANGUAGE:

Chinese

=> D L7 IBIB ABS

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1057873 CAPLUS

TITLE:

Establishment of ISSR reaction system of Sargentodoxa

cuneata

AUTHOR(S):

Cai, Yan-lin; Jin, Ze-xin; Li, Jun-min

CORPORATE SOURCE: .

College of Life Science, Hangzhou Normal University,

Hangzhou, 310018, Peop. Rep. China

SOURCE:

Jiangxi Nongye Daxue Xuebao (2006), 28(4), 583-586

CODEN: JNXUEV; ISSN: 1000-2286

PUBLISHER:

Jiangxi Nongye Daxue Xuebao Bianjibu

DOCUMENT TYPE:

Journal

LANGUAGE:

Chinese

ABThe genomic DNA of Sargentodoxa cuneata was extracted with improved SDS method. The effect of the concentration of Mg2+, dNTP, DNA template, primer,

DNA polymerase and bovine serum albumin on ISSR amplification of Sargentodoxa cuneata was tested and the suitable ISSR reaction system was established as follows: 4 + Taq polymerase corresponding buffer (10 mmol/L Tris - HCl, pH9.0, 50 mmol/L KCl, 1 g/L Triton

X - 100), 0.5U Tag DNA polymerase, 2 mmol/L MgCl2, 0.1 mol/L 4 +

dNTP, 12 pmol primer, 10 ng template DNA and 2 mg/mL BSA in total 10 μL PCR reaction volume. The suitable annealing temperature in the

- PCR reaction system was 52.4 °C.

=> cross (p) linking

545016 CROSS

20121 CROSSES

562293 CROSS

```
(CROSS OR CROSSES)
        48753 LINKING
         531 LINKINGS
        49166 LINKING
               (LINKING OR LINKINGS)
        14956 CROSS (P) LINKING
1.8
=> Borate and L8
       70213 BORATE
        11401 BORATES
        74557 BORATE
               (BORATE OR BORATES)
          80 BORATE AND L8
L9 .
=> pH9
L10
        144 PH9
=> L10 and L9
      0 L10 AND L9
=> antibody and L9
       323887 ANTIBODY
       386791 ANTIBODIES
     513393 ANTIBODY
               (ANTIBODY OR ANTIBODIES)
           2 ANTIBODY AND L9
L12
=> D L12 IBIB ABS 1-2
L12 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:1293316 CAPLUS
                      147:517706
DOCUMENT NUMBER:
                      Process for cross-linking moieties
TITLE:
                      for medicinal and diagnostic use
INVENTOR(S):
                      Mock, Graham
PATENT ASSIGNEE(S): UK
                      Brit. UK Pat. Appl., 44pp.
SOURCE:
                      CODEN: BAXXDU
                      Patent
DOCUMENT TYPE:
LANGUAGE:
                      English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                KIND
                                      APPLICATION NO. DATE
    PATENT NO.
                            DATE
    _____
                      _ _ _ _
                             _____
    GB 2438088
                       A
                                       GB 2007-9127
                             20071114
                      A2 20071122 WO 2007-GB1745
    WO 2007132207
```

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM GB 2006-9370 A 20060511 PRIORITY APPLN. INFO.: OTHER SOURCE(S): MARPAT 147:517706

GI

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- A process for linking a first moiety, wherein the first moiety is not a AB cell membrane or cell membrane fraction and is equipped with one or more free amino groups, comprising: conjugating the first moiety with a linker I or II: wherein Y is an organic linker with 2-10 carbon atoms in the backbone; m and n are 1-3; and R1-R20 are H or substituents with preferred compds. featuring SO3Na substituents on the rings; the first moiety-linker conjugate may then be reacted with a second moiety to form the conjugated product. The process is particularly useful for linking a first moiety, such as a nucleic acid or protein, with a second moiety, such as an antibody or enzyme. Preferred linkers are 4,4'-diisothiocyanato-2.2'-stilbenedisulfonic acid (DIDS) and dimers thereof of general formula II formed with a central amine compound The conjugates formed, their medicinal or diagnostic use and dimer compds. of general formula II are also claimed. DIDS was added to horseradish peroxidase in borate buffer. After half an hour, monoclonal antibody to human chorionic gonadotropin was added. The product was purified by anion exchange chromatog.

REFERENCE COUNT: THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

1962:9071 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

56:9071

ORIGINAL REFERENCE NO.: 56:1735i,1736a

TITLE:

A new two-stage method for cross-

linking proteins

AUTHOR(S):

Borek, Felix

CORPORATE SOURCE:

Armed Forces Inst. of Pathol., Washington, DC

SOURCE:

Nature (London, United Kingdom) (1961), 191, 1293-4

CODEN: NATUAS; ISSN: 0028-0836

DOCUMENT TYPE:

Journal

LANGUAGE:

Unavailable

Ferritin and rabbit globulin in citrate buffer (pH 5) were stirred at 4° with dianisidine (I) and NaNO2 in 0.017N HCl for 2 hrs., dialyzed against 0.08M borate (pH 9.4) and finally against neutral saline to yield after separation by electrophoresis a conjugate of intermediate mobility, which reacted with both antiferritin and antirabbit globulin. Similar conjugates prepared from tobacco mosaic antibodies and Forssman antibodies using I had higher antibody activity than those prepared using toluene 2,4-diisocyanate.

=> FIL STNGUIDE

TOTAL SINCE FILE COST IN U.S. DOLLARS SESSION ENTRY 31.42 32.05 FULL ESTIMATED COST TOTAL SINCE FILE DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SESSION ENTRY

-2.40 -2.40CA SUBSCRIBER PRICE

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FILE CONTAINS CURRENT INFORMATION. LAST RELOADED: Feb 1, 2008 (20080201/UP).

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Tobia et al. (Nath. J. PL. path. 1982, Vol. 88, pp. 171-183).

MISSING OPERATOR '102(B' The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> file caplus COST IN U.S. DOLLARS SINCE FILE ENTRY 0.06 FULL ESTIMATED COST

SINCE FILE TOTAL DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SESSION ENTRY 0.00 -2.40 CA SUBSCRIBER PRICE

TOTAL

SESSION

32.11

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FILE COVERS 1907 - 4 Feb 2008 VOL 148 ISS 6 FILE LAST UPDATED: 3 Feb 2008 (20080203/ED)

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=> TBST

11 TBST L13

=> L2 and L13

0 L2 AND L13

=> washiing and L134

L134 NOT FOUND

The L-number entered could not be found. To see the definition of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).

=> washing and L13

188601 WASHING

14036 WASHINGS

199925 WASHING

(WASHING OR WASHINGS)

3 WASHING AND L13 L15

=> D L15 IBIB ABS 1-3

L15 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:619868 CAPLUS

147:26442 DOCUMENT NUMBER:

Removal of embedding medium TITLE: Winther, Lars; Lindberg, Martin Dako Denmark A/S, Den. INVENTOR(S):

PATENT ASSIGNEE(S): PCT Int. Appl., 95pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                        KIND
                               DATE
                                          APPLICATION NO.
                         ----
                                                                   20061124
    WO 2007062649
                                         WO 2006-DK660
                         A1
                                20070607
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,
            KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
            MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
            RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
            TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
            GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM
                                           EP 2006-799
                                                                   20060116
                                20070606
    EP 1793218
                         Α1
        R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
            BA, HR, MK, YU
PRIORITY APPLN. INFO.:
                                            US 2005-740789P
                                                               P 20051130
                                                                A 20060116
                                            EP 2006-799
```

A method, apparatus and system are described for automated removal of an AB embedding medium from an embedded biol. sample. The method comprises the steps of: providing an automated sample processing apparatus having an automated process operation capability that causes automated process operation events through robotic sample process functions; providing a clearing solvent, e.g. an organic solvent, capable of lowering the m.p. of an embedding medium and/or dissolving an embedding medium; loading a plurality of carriers with embedded biol. samples in the automated sample processing apparatus; exposing an embedded biol. sample to the clearing solvent, whereby the embedding medium is liquefied; and providing a washing solution capable of removing the clearing solvent and the liquefied embedded medium from said biol. sample, said clearing solvent and said washing solution being immiscible. Formalin-fixed paraffin-embedded tissue on slides was deparaffinized by horizontal dewaxing with Histo-Clear on the AutostainerTM. Rehydration/ washing was done with TBST (Tris-buffered saline Tween-20), followed by target retrieval, immunostaining, and Hematoxylin and H/E staining. The slides were evaluated and were found to be acceptable regarding dewaxing.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2004:479311 CAPLUS

DOCUMENT NUMBER:

141:312941

TITLE:

Monoclonal anti-hypoxia inducible factor 1α

antibody for screening antianemic peptides derived

from phage display library

INVENTOR(S):

Wang, Bin; Zhang, Aixia; Xiao, Jigao

PATENT ASSIGNEE(S):

Nanjing Medical University, Peop. Rep. China Faming Zhuanli Shenqing Gongkai Shuomingshu, 10 pp.

SOURCE: Faming Zhuani: CODEN: CNXXEV

DOCUMENT TYPE:

Patent

LANGUAGE:

Chinese

FAMILY ACC. NUM. COUNT:

7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1398895	Α	20030226	CN 2002-138179	20020828
ORITY APPLN. INFO.:			CN 2002-138179	20020828

AB The disclosed hypoxia-inducible factor 1-associated peptides contain peptide sequence of GlyProHisHisTyrTrpTyrHisLeuArgLeuPro. The HIF1-associated peptides are screened from phage display peptide library by ELISA using plate-immobilized monoclonal anti-HIF1α antibody and washing buffers containing TBST and/ro Tween-20. The peptide library is expanded in Escherichia coli ER2378 culture medium. The HIF1 associated peptide may be used as medicine for treating hypoxic, hypoxemic and anemic diseases.

L15 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2004:18822 CAPLUS

DOCUMENT NUMBER:

140:56024

TITLE:

Assay for transformed alpha fetal protein

INVENTOR(S):

Mizejewski, Gerald J.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 5 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
				-		
US 2004005640	A1	20040108	US 2003-424018	20030425		
PRIORITY APPLN. INFO.:			US 2002-375576P P	20020425		

A method for determining the existence of transformed alpha fetal protein in a sample. The first step is mixing said reagents by inversion before use. The second step is providing a microtiter plate with wells coated with synthetic TAFP diluted in a coating buffer, dispensing PSB buffer to wet the well surfaces, waiting a period of time and decanting the microtiter The third step is providing a first washing of the well(s) with a wash buffer for removing unbound material. The fourth step is adding non-fat dry milk to the coating buffer and incubating the microtiter plate for a first period of time at room temperature for blocking nonspecific binding sites. The fifth step is providing a second washing of the well with a wash buffer for removing unbound material. The sixth step is adding anti-TAFP antibody diluted in a binding buffer for a second period of time for allowing the primary antipetide antibodies to bind. The seventh step is providing a third washing of the well(s) with a wash buffer for removing unbound material. The eighth step is adding diluted goat anti-rabbit immunoglobuin-horseradish peroxidase conjugate in TBST for binding of the primary to the secondary antibody and then incubating for a third period of time. The ninth step is providing a fourth washing of the well(s) with a TBST-containing buffer for removing unbound material. The tenth step is adding horseradish peroxidase substrate and incubating at room temperature for developing color. The eleventh step is adding stop solution to said well after a fourth period of time for stopping the test. Finally, the twelfth step is determining the absorbance of the alpha fetal protein peptide at a wavelength using a microplate reader.

=> borate (w) buffer

L19 8394 BORATE (W) BUFFER

=> pH9

L20 250 PH9

=> L19 and L20

L21 2 L19 AND L20

=> antibody

L22 1180705 ANTIBODY

=> L22 and 121

L23 1 L22 AND L21

=> D L23 IBIB ABS

L23 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:403468 CAPLUS

DOCUMENT NUMBER: 111:3468

TITLE: The production of phospholipase A2 conjugates with

tobacco mosaic virus and their properties

AUTHOR(S): Vakhabov, A. Kh.; Yakubov, I. T.; Zaitova, A. Z.;

Rakhimov, M. M.

CORPORATE SOURCE: USSR

SOURCE: Biologicheskie Nauki (Moscow) (1989), (2), 22-6

CODEN: BINKBT; ISSN: 0470-4606

DOCUMENT TYPE: Journal LANGUAGE: Russian

AB Optimum conditions for introducing phospholipase A2 (I) label in tobacco

mosaic virus (TMV) and enzyme properties of the conjugates were

investigated. I-TMV conjugates were prepared in pH9 borate buffer using 2.5% glutaraldehyde as coupling

agent followed by dialysis (2 days). The conjugates had high I activity

and could react with TMV antibodies. The activity of I,

following the conjugate formation decreased, the pH optimum shifted to

acid zone, the thermostability of the enzyme increased, and temperature optimum somewhat increased. The I-TMV conjugates may be useful for accelerated

diagnosis of the virus.

=> FIL STNGUIDE

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
63.63
63.84

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION

CA SUBSCRIBER PRICE -0.80 -0.80

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Feb 1, 2008 (20080201/UP).

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

1962:9071 CAPLUS

DOCUMENT NUMBER:

56:9071

ORIGINAL REFERENCE NO.: 56:1735i,1736a

A new two-stage method for cross-

linking proteins

AUTHOR (S):

Borek, Felix

CORPORATE SOURCE:

Armed Forces Inst. of Pathol., Washington, DC

SOURCE:

Nature (London, United Kingdom) (1961), 191, 1293-4

CODEN: NATUAS; ISSN: 0028-0836

DOCUMENT TYPE:

Journal

LANGUAGE:

Unavailable

Ferritin and rabbit globulin in citrate buffer (pH 5) were stirred at 4° with dianisidine (I) and NaNO2 in 0.017N HCl for 2 hrs., dialyzed against 0.08M borate (pH 9.4) and finally against neutral saline to yield after separation by electrophoresis a conjugate of intermediate mobility, which reacted with both antiferritin and antirabbit globulin. Similar conjugates prepared from tobacco mosaic antibodies and Forssman antibodies using I had higher antibody activity than those prepared using toluene 2,4-diisocyanate.

```
=> antibody
        323887 ANTIBODY
        386791 ANTIBODIES
        513393 ANTIBODY
                 (ANTIBODY OR ANTIBODIES)
=> L16 and L17
      72 L16 AND L17
=> cross (1) linking
        545016 CROSS
         20121 CROSSES
        562293 CROSS
                 (CROSS OR CROSSES)
         48753 LINKING
           531 LINKINGS
         49166 LINKING
                 (LINKING OR LINKINGS)
         14956 CROSS (L) LINKING
=> L19 and L18
            0 L19 AND L18
L20
=> purification and L19
        349143 PURIFICATION
         1135 PURIFICATIONS
        349930 PURIFICATION
                 (PURIFICATION OR PURIFICATIONS)
        317115 PURIFN
           238 PURIFNS
        317219 PURIFN
                 (PURIFN OR PURIFNS)
        513631 PURIFICATION
                 (PURIFICATION OR PURIFN)
L21
           226 PURIFICATION AND L19
=> purification
        349143 PURIFICATION
          1135 PURIFICATIONS
        349930 PURIFICATION
                 (PURIFICATION OR PURIFICATIONS)
        317115 PURIFN
           238 PURIFNS
        317219 PURIFN
                 (PURIFN OR PURIFNS)
L22
        513631 PURIFICATION
                 (PURIFICATION OR PURIFN)
=> L22 and 118
       1 L22 AND L18
=> L22 and L16
        14 L22 AND L16
=> alkaline (w) buffer
        129566 ALKALINE
            79 ALKALINES
        129632 ALKALINE
                 (ALKALINE OR ALKALINES)
        433088 ALK
           672 ALKS
        433448 ALK
                 (ALK OR ALKS)
        472508 ALKALINE
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(ALKALINE OR ALK)

243802 BUFFER 35613 BUFFERS

262799 BUFFER

(BUFFER OR BUFFERS)

L25

1120 ALKALINE (W) BUFFER

=> L25 and L16

3 L25 AND L16

=> D L26 IBIB ABS 1-3

L26 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2007:510230 CAPLUS

DOCUMENT NUMBER:

146:496398

TITLE:

RNA extraction and detection method and deactivating

an RNase in a sample

INVENTOR(S):

Tonoike, Hiroshi; Shirasaki, Yoshinari; Nishimura, Naoyuki; Tamatsukuri, Shigeru; Watanabe, Kuhomi;

Sakakura, Yasuhiko; Nakayama, Hiroyuki

PATENT ASSIGNEE(S):

Shimadzu Corporation, Japan

SOURCE:

PCT Int. Appl., 59pp.

DOCUMENT TYPE:

CODEN: PIXXD2

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION: DATENT MA

F	PATENT	NO.			KIN	D	DATE			APPL	ICAT:	ION 1	NO.		D	ATE	
- W	70 200	70527	65		A1	_	2007	0510		WO 2	006-	JP32:	2010		2	0061	102
	W :	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	.DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,
		KP,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MΑ,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	sc,	SD,	SE,	SG,	SK,	SL,	SM,	sv,	SY,	ТJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
	RW	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
							GN,										
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM										
PRIORI	TY AP	PLN.	INFO	. :						JP 2	005-	3193	32	1	A 2	0051	102
										JP 2	005-	3193	33	7	A 2	0051	102
										JP 2	005-	3193	34	i	A 2	0051	102
										JP 2	006-	1163	10	1	A 2	0060	420
~~ *				4. 1.	£			ــــــــــــــــــــــــــــــــــــــ	·	D	NT	ال حاد د	-h			000	

Disclosed is a method for deactivating an RNase which generally occurs in AΒ a sample such as a biol. sample (particularly, an excrement sample) or a living body-derived sample prepared by separation of an RNA-containing material or

the like from the biol. sample (particularly, an excrement-derived sample). Also disclosed is a method for extraction or detection of RNA from or in the sample. The RNA extraction method comprises the steps of: preparing a mixture of a sample containing an RNA-containing material and an RNase and an alkaline

treatment reagent comprising at least a reducing agent under heating conditions, wherein the mixture has a pH value of 8.1 or higher. The method also comprises maintaining the mixture under the same heating conditions as those employed in the preceding step to achieve the deactivation of the RNase and the extraction of RNA from the RNA-containing material. The RNA detection method comprises the steps of: mixing a sample treatment solution containing the RNA extracted by the RNA extraction method and a amplification reaction

solution; and performing an RNA amplification reaction.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

6

ACCESSION NUMBER:

2007:238281 CAPLUS

DOCUMENT NUMBER:

147:110944

TITLE:

Evaluation of two viral extraction methods for the

detection of human noroviruses in shellfish

with conventional and real-time reverse transcriptase

PCR

AUTHOR(S):

Baert, L.; Uyttendaele, M.; Debevere, J.

CORPORATE SOURCE:

Laboratory of Food Microbiology and Food Preservation, Department of Food Safety and Food Quality, Faculty of Bioscience Engineering, Ghent University, Ghent, Belg. Letters in Applied Microbiology (2007), 44(1), 106-111

SOURCE:

CODEN: LAMIE7; ISSN: 0266-8254

PUBLISHER:

Blackwell Publishing Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English Two viral extraction methods were compared in order to establish a sensitive

and simple detection method for human noroviruses (NV) in bivalve shellfish. A direct RNA extraction method and an alkaline virus elution-concentration method were tested on artificially contaminated mussels.

The latter used an alk. buffer and polyethylene glycol

(PEG) to isolate and concentrate the virus particles from shellfish. methods Trizol was used to release RNA. The final RNA exts. were amplified and detected with conventional and real-time reverse transcriptase PCR. The direct RNA extraction method was not able to detect low inoculation levels. However, the virus elution-concentration method was more sensitive. The alkaline elution-PEG concentration method followed by Trizol effectively removed inhibitory components and fulfilled the demands to be a useful tool for routine testing of shellfish for NV detection. Because of the lack of standardized methods to detect NV in shellfish, many

'inhouse' extraction methods are used in practice. A comparison of these methods aims to determine a simple, rapid, and sensitive method that could be a candidate method for screening suspected shellfish.

REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

28

ACCESSION NUMBER:

2004:857770 CAPLUS

DOCUMENT NUMBER:

141:328130

TITLE:

Dilution liquid for norovirus or sapovirus test sample, and method for detecting virus

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS

Kamata, Kunio; Kato, Daisuke Denka Seiken Co., Ltd., Japan

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT I	NO.			KINI)	DATE		Ī	APPL	[CAT]	I NO	. O <i>v</i>		D	ATE	
	- -							•					-		- ·	
WO 2004	0883	11		A1		2004	1014	1	NO 20	004-0	JP468	37		20	0403	331
W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,
	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	NO,
	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ΤĴ,
				TT,												
RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,

BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,

TD, TG

JP 2004301684 Α 20041028 JP 2003-95349 20030331

JP 3887340 B2 20070228

A1 20060928 US 2006216695 US 2005-551548 20050930 PRIORITY APPLN. INFO.: JP 2003-95349 A 20030331

WO 2004-JP4687 W 20040331

AΒ A dilution liquid for a Norovirus or Sapovirus test sample is provided, which comprises an alk. buffer solution having a pH of 9.0 to 10.0. Also provided is a method for detecting Norovirus or Sapovirus by an immunoassay using this test sample dilution liquid The method allows Norovirus or Sapovirus to be detected from a Norovirus or Sapovirus test sample such as a feces sample, a vomiting sample, a body fluid sample, a blood sample, a body tissue sample or a food sample in an easy and simple manner, without the use of a special device such as a centrifuge, with improved accuracy, and with complete removal of nonspecific factors.

REFERENCE COUNT:

10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L23 IBIB ABS

L23 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:275428 CAPLUS

DOCUMENT NUMBER:

145:370346

Detection of norovirus capsid proteins in TITLE:

fecal and food samples by a real time immuno-PCR

method

AUTHOR(S):

Tian, P.; Mandrell, R.

CORPORATE SOURCE:

United States Department of Agriculture, Agricultural Research Service, Produce Safety and Microbiology Research Unit, Western Regional Research Center,

Albany, CA, USA

SOURCE:

Journal of Applied Microbiology (2006), 100(3),

564-574

34

CODEN: JAMIFK; ISSN: 1364-5072

PUBLISHER:

Blackwell Publishing Ltd.

DOCUMENT TYPE:

Journal LANGUAGE: English

The objective of this study was to develop a sensitive real time immuno-polymerase chain reaction (rtI-PCR) method for detecting norovirus (NV) capsid protein in food samples. The viral antigens were captured by two polyclonal antisera against recombinant Norwalk viral-like particles (rNVLPs). Biotin-conjugated antibodies, avidin and biotin-conjugated DNA reporter were used to convert the protein signals into DNA signals. The reporter DNA was then amplified by addition of primers and PCR. A real time PCR method was used in order to perform a quant. post-PCR anal. One hundred rNVLPs (10 fg) and a NV sample containing 660 rNVLPs equivalent particle units (66 fg) could be detected by this method. The PCR inhibitors present in the food samples had minimal effect on antigen capture and were removed by multiple wash steps during the rtI-PCR procedure. The sensitivity of rtI-PCR was >1000-fold higher than the standard ELISA and approx. 10 times higher than reverse transcription PCR in detection of NV capsid protein in stool and food samples. This is the first report of a rtI-PCR method to detect NV in contaminated food samples without concentration or purifn. of the virus.

REFERENCE COUNT:

THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L24 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:694564 CAPLUS

DOCUMENT NUMBER: 147:78665

TITLE: Method for effectively removing virus from suspended

solid-containing water by combination of filtration

and UV irradiation

INVENTOR(S): Kato, Toshiaki; Shibata, Toshiyuki; Miki, Satoru; Ito,

Kimio

PATENT ASSIGNEE(S): Nippon Steel Corp., Japan; Nippon Steel Engineering

Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 15pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007160165	A	20070628	JP 2005-357349	20051212
PRIORITY APPLN. INFO.:			JP 2005-357349	20051212

AB To remove virus (e.g., coliphage, norovirus), suspended solid (SS)-containing water (e.g., sewage treatment water, seawater) is filtered to remove SS and then exposed to UV (in photocatalyst-equipped UV irradiation reflection vessel). Before the UV irradiation, oxidant chosen from H2O2, O3, and/or Cl compound is preliminary added to the filtered water, according to its turbidity.

L24 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2007:195721 CAPLUS

DOCUMENT NUMBER:

147:242206

TITLE:

Waterborne norovirus outbreaks

AUTHOR(S):

Maunula, Leena

CORPORATE SOURCE:

Department of Food & Environmental Hygiene, Faculty of Veterinary Medicine, University of Helsinki, 00014,

Finland

SOURCE: .

Future Virology (2007), 2(1), 101-112

CODEN: FVUIAM; ISSN: 1746-0794

PUBLISHER:
DOCUMENT TYPE:

Future Medicine Ltd.
Journal; General Review

LANGUAGE:

English

AB A review. Noroviruses (NoVs) are the most common nonbacterial causative agents of waterborne outbreaks. Due to the mild and short-lived disease of gastroenteritis, even large epidemics may go unnoticed, since patients do not necessarily visit a doctor. NoVs have several means by which to survive both in the environment and in a population. The nonenveloped small virus retains its infectivity in the environment, and particularly in cold water, for a long time. Unlike most enteric viruses, it causes disease both in children and adults. A large number of genotypes combined with a small infective dose and short-term immunity guarantee efficient circulation of these viruses. The world of NoVs has been revealed to us predominantly by mol. methods. Having learned to detect these viruses first in patients, the emphasis is now in searching for methods sensitive enough to find them in environmental samples. In this review, the latest methods and their use in monitoring of these viruses are discussed.

REFERENCE COUNT:

121 THERE ARE 121 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L24 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2006:1345537 CAPLUS

DOCUMENT NUMBER:

146:235176

Presence of viral proteins in drinkable water -TITLE:

sufficient condition to consider water a vector of

viral transmission?

AUTHOR (S):

Gutierrez, M. F.; Alvarado, M. V.; Martinez, E.;

Ajami, N. J.

CORPORATE SOURCE:

Laboratorio de Virologia, Departamento de

Microbiologia, Universidad Javeriana, Bogota, Colombia

SOURCE:

Water Research (2007), 41(2), 373-378

CODEN: WATRAG; ISSN: 0043-1354

PUBLISHER:

Elsevier Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

In order to determine the role of water as a possible vector for transmission of the most prevalent enteric viruses affecting infantile populations, 226 water samples were collected from Facatativa's (Colombian municipality located 30 km away from Bogota) water works in the years 2000, 2002, and The samples were clarified and virus was concentrated by filtering and ultrafiltering techniques. The presence of viral protein (VP) was assessed by enzyme immunoassay method (EIA) and viral RNA presence was detected by reverse transcriptase and polymerase chain reaction (RT-PCR). Using these techniques, one sample pos. for Astrovirus (HAstV) was found in a sample collected from the river that supplies the aqueduct, two samples pos. for Norovirus (NV) from fresh treated potable water and 13 samples pos. for Rotavirus (RV), some in water from the plant during treatment and others from treated fresh water. RT-PCR inhibitors were also found in water samples obtained from the plant and in the fresh treated water. inhibitors were found in the river water. VP, but no nucleic acid, was detected in the water samples at different stages of treatment, thus suggesting that the virus might have been complete and infectious at some stage prior to water purifn.

REFERENCE COUNT:

36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2006:275428 CAPLUS

DOCUMENT NUMBER:

145:370346

TITLE:

Detection of norovirus capsid proteins in

fecal and food samples by a real time immuno-PCR

method

AUTHOR(S):

Tian, P.; Mandrell, R.

CORPORATE SOURCE:

United States Department of Agriculture, Agricultural Research Service, Produce Safety and Microbiology

Research Unit, Western Regional Research Center,

Albany, CA, USA

SOURCE:

Journal of Applied Microbiology (2006), 100(3),

564-574

CODEN: JAMIFK; ISSN: 1364-5072

PUBLISHER:

Blackwell Publishing Ltd. Journal

DOCUMENT TYPE: English LANGUAGE:

The objective of this study was to develop a sensitive real time immuno-polymerase chain reaction (rtI-PCR) method for detecting norovirus (NV) capsid protein in food samples. The viral antigens were captured by two polyclonal antisera against recombinant Norwalk viral-like particles (rNVLPs). Biotin-conjugated antibodies, avidin and biotin-conjugated DNA reporter were used to convert the protein signals into DNA signals. The reporter DNA was then amplified by addition of primers and PCR. A real time PCR method was used in order to perform a quant. post-PCR anal. One hundred rNVLPs (10 fg) and a NV sample containing 660 rNVLPs equivalent particle units (66 fg) could be detected by this method. The PCR inhibitors present in the food samples had minimal effect on antigen capture and were removed by multiple wash steps during the rtI-PCR procedure. The sensitivity of rtI-PCR was >1000-fold higher than the standard ELISA and approx. 10 times higher than reverse transcription PCR in

detection of NV capsid protein in stool and food samples. This is the first report of a rtI-PCR method to detect NV in contaminated food samples without concentration or purifn. of the virus.

REFERENCE COUNT:

THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

34

ACCESSION NUMBER:

2006:236156 CAPLUS

DOCUMENT NUMBER:

145:50522

TITLE:

Effect of temperature on the survival of F-specific RNA coliphage, feline calicivirus, and Escherichia

coli in chlorinated water

AUTHOR (S):

Allwood, Paul B.; Malik, Yashpal S.; Maherchandani,

Sunil; Hedberg, Craig W.; Goyal, Sagar M.

CORPORATE SOURCE:

Division of Environmental and Occupational Health, School of Public Health, University of Minnesota,

Minneapolis, MN, 55455, USA

SOURCE:

International Journal of Environmental Research and

Public Health (2005), 2(3-4), 442-446

CODEN: IJERGQ; ISSN: 1660-4601

URL: http://mdpi.org/subscribers/ijerph/papers3/ijerph

2005030008.pdf

PUBLISHER:

DOCUMENT TYPE:

Molecular Diversity Preservation International

Journal; (online computer file)

LANGUAGE:

English

We compared the survival of F-specific RNA coliphage MS2, feline calicivirus, and E. coli in normal tap water and in tap water treated to an initial concentration of 50 ppm free chlorine and held at 4°C, 25°C, or 37°C for up to 28 days. Our aim was to determine which of these two organisms (coliphage or E. coli) was better at indicating norovirus survival under the conditions of the experiment There was a relatively rapid decline of FCV and E. coli in 50 ppm chlorine treated water and both organisms were undetectable within one day irresp. of the temperature In contrast, FRNA phage survived for 7 to 14 days in 50 ppm chlorine treated water at all temps. All organisms survived for 28 days in tap water at 4°C, but FCV was undetectable on day 21 and day 7 at 25°C and 37°C, resp. Greater survival of FRNA phage compared to E. coli in 50 ppm chlorine treated water suggests that these organisms should be further investigated as indicators of norovirus in depurated shellfish, sanitized produce, and treated wastewater which are all subject to high-level chlorine treatment.

REFERENCE COUNT:

42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2005:1152840 CAPLUS

DOCUMENT NUMBER:

143:385958

TITLE:

Method and apparatus for cleaning bivalves by

discharging and killing norovirus using

electrolyzed water, and judgement of cleaning

performance of the method

INVENTOR(S):

Murokoshi, Akira; Yoshimizu, Mamoru

PATENT ASSIGNEE(S):

Yanmar Diesel Engine Co., Ltd., Japan; Marino Forum 21

Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005295820 PRIORITY APPLN. INFO.:	Α	20051027	JP 2004-112914 JP 2004-112914	20040407 20040407

Cleaning of bivalves is carried out by (1) placing the bivalves in a cleaning tank filled with cleaning water produced by electrolysis and (2) controlling temperature of the water at a range where the bivalves maintain physiol. activity to pass the water through the bivalves, discharge norovirus out of the bivalves together with water flow, and kill the discharged norovirus with the cleaning water.

Alternatively, bivalves are cleaned by controlling temperature of the cleaning water at 20-43° to kill norovirus in the shells and that excreted from the shell. Apparatus for the method is also claimed. Cleaning performance of the methods is judged by applying the above method to bivalves to which feline calicivirus as substitute of norovirus is introduced. Opening of the shells of the cleaned bivalves and killing of norovirus in them may be carried out by heating them in a closed container at 30-50° and <10 MPa.

L24 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2005:1066181 CAPLUS

DOCUMENT NUMBER:

143:445964

TITLE:

New generation molecular biology methods to detect

pathogens in water

AUTHOR(S):

Straub, Timothy M.; Valdez, Catherine O.;

Bruckner-Lea, Cynthia J.

CORPORATE SOURCE:

Pacific Northwest National Laboratory, Richland, WA,

TICA

SOURCE:

Proceedings - Water Quality Technology Conference and

Exhibition (2004) mon8.4/1-mon8.4/7 CODEN: PWQCD2; ISSN: 0164-0755

PUBLISHER: DOCUMENT TYPE: American Water Works Association Journal; (computer optical disk)

LANGUAGE: English

Mol. biol. methods such as PCR and hybridization have significantly decreased the length of time required for the detection of waterborne pathogens. For some waterborne agents like noroviruses, PCR and hybridization assays are the only reliable methods for their detection. The advantages gained by PCR have introduced new problems for applying these assays to detect waterborne pathogens. These problems include, but are not limited to: sample carryover contamination, difficulty in detecting potentially viable agents, and the difficulty in optimizing an assay to detect more than 1 pathogen or gene target per reaction. Gene chip technol. is now being widely reported as the solution for overcoming some of these shortfalls. The authors' research that is presented in this paper highlights both the benefits and drawbacks of using this relatively new mol. biol. technique. It concludes with several recommendations on how this method might be improved such that it becomes a more robust assay system in terms of speed, specificity and sensitivity and easier for end users to perform.

REFERENCE COUNT:

17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2005:367972 CAPLUS

DOCUMENT NUMBER:

142:425891

TITLE:

Production of soluble recombinant Norovirus

RNA-independent RNA polymerase in insect cells via

cation-exchange purification

· INVENTOR(S):

Takai, Reiko; Kojima, Shigeyuki; Hoshino, Fuminori;

Kageyama, Tsutomu; Fukushi, Shuetsu

PATENT ASSIGNEE(S):

BML Inc., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	<u></u>			
JP 2005110517	A	20050428	JP 2003-345286	20031003
PRIORITY APPLN. INFO.:			JP 2003-345286	20031003

A method for production of RNA-dependent RNA polymerase (RdRp) as a soluble protein is provided. The method comprises the below-mentioned process (1) recombinant baculovirus transfected with the nucleic acid encoding RdRp is used to infect the insect origin cells (2) the infected insect origin cells are cultured (3) the extract of the infected insect origin cells is contacted with cation-exchange resin and eluted with the salt concentration gradient, from in this eluent, the RdRp is isolated. Crude extract of Tn5 cells infected with recombinant baculovirus was applied to the Hi-Trap SP column (cation-exchange column), and when eluted with the linear gradient of NaCl, RdRp was recognized in 320-550mM NaCl fraction.

L24 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2005:345569 CAPLUS

DOCUMENT NUMBER:

143:401540

TITLE:

Characterization of the norovirus 3C-like

protease

AUTHOR(S):

Someya, Yuichi; Takeda, Naokazu; Miyamura, Tatsuo Department of Virology II, National Institute of

Infectious Diseases, 1-23-1 Toyama, Shinjuku, Tokyo,

162-8640, Japan

SOURCE:

Virus Research (2005), 110(1-2), 91-97

CODEN: VIREDF; ISSN: 0168-1702

PUBLISHER: DOCUMENT TYPE:

CORPORATE SOURCE:

Elsevier B.V.

Journal English LANGUAGE:

The recombinant 3C-like protease of Chiba virus, a Norovirus, expressed in Escherichia coli cells was purified and characterized as to effects of pH, temperature, salt contents, and SH reagents on its proteolytic activity. The optimal pH and temperature of the 3C-like protease for the proteolytic activity were 8.6 and 37 °C, resp. Increased concentration (.apprx.100 mM) of monovalent cations such as Na+ and K+ was inhibitory to the activity. Hg2+ and Zn2+ remarkably inhibited the protease activity, while Mg2+ and Ca2+ had no virtual effect. Several sulfhydryl reagents such as p-chloromercuribenzoic acid, Me methanethiosulfonate, N-ethylmaleimide and N-phenylmaleimide also blocked the activity, confirming the previous result that cysteine residue(s) were responsible for the proteolysis.

REFERENCE COUNT:

THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS 27 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2004:763949 CAPLUS

DOCUMENT NUMBER:

141:400247

TITLE:

Detection of enteric viruses, Giardia and

Cryptosporidium in two different types of drinking

water treatment facilities

AUTHOR(S):

Ali, M. A.; Al-Herrawy, A. Z.; El-Hawaary, S. E.

CORPORATE SOURCE:

Environmental Virology Laboratory, Department of Water Pollution Researches, National Research Centre, Cairo,

12311, Egypt

SOURCE:

Water Research (2004), 38(18), 3931-3939

CODEN: WATRAG; ISSN: 0043-1354

PUBLISHER:

Elsevier B.V.

DOCUMENT TYPE:

Journal English

LANGUAGE:

Two types of drinking water treatment facilities (2 conventional drinking water treatment plants (DWTPs) and 2 compact units (Cus)) were compared referring to their production capacity. Water samples were collected from 3 main points: (a) different water treatment steps (b) washings of sand

filters and (c) distribution system at different distances from the water treatment plants. Both viruses and protozoa were concentrated from each water sample by adsorption and accumulation on the same nitrocellulose membrane filters (0.45 μ m pore size). Enteroviruses were detected by plaque infectivity assay in BGM cells and HAV, HEV and Norovirus were detected by RT-PCR. Giardia and Cryptosporidium were detected by conventional staining methods and PCR. The results revealed that enterovirus load at the intake is 10-15 PFU/L for the 2 compact units and 4.5-75 PFU/L for the 2 conventional DWTPs. The virus load in distribution system of the 1st type DWTPs at 1 Km from the plant was the same as that of the intake. Viruses in the other type of treatment plants CUs at 1, 5 and 7 Km, were much reduced. Examination of raw water sediments of the 2 DWTPs showed enterovirus counts 12-17.5 PFU/L. Virus count was reduced in sand of filters after washing. Giardia cysts were equally detected by microscopy and PCR in only intake samples of EL-Hawamdia CU (33.3%) and Meet Fares DWTP (50%). Cryptosporidium oocysts were equally detected by microscopy and PCR in intake samples of Abo EL-Nomros CU (100%), EL-Hawamdia CU (66.7%) and Fowa DWTP (50%). At Meet Fares DWTP 3 pos. intake samples for Cryptosporidium were detected by PCR, compared with only 2 pos. samples by microscopy. Giardia cysts and Cryptosporidium oocysts were detected in raw water sediment and sand of filters before washing. Only one sample from Meet Fares DWTP sand of filters after washing was pos. for both Giardia and Cryptosporidium. It can be concluded that the poor microbial quality of the water may be due to improper operational skills and management of the various water treatment plants (especially at the 2 high capacity treatment plants).

THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS 38 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

2003:709504 CAPLUS ACCESSION NUMBER:

139:327663 DOCUMENT NUMBER:

Calicivirus - An emerging contaminant in water: State TITLE:

Huffman, Debra E.; Nelson, Kara L.; Rose, Joan B. College of Marine Science Water AUTHOR(S):

College of Marine Science, University of South CORPORATE SOURCE:

Florida, St. Petersburg, FL, 33701, USA

Environmental Engineering Science (2003), 20(5), SOURCE:

503-515

CODEN: EESCF5; ISSN: 1092-8758

Mary Ann Liebert, Inc. PUBLISHER: Journal; General Review DOCUMENT TYPE:

LANGUAGE: English

A review. There was a noteworthy surge of interest with regard to the viruses known as human Caliciviruses (HuCVs) and their impact on water-borne disease. Recent epidemiol. studies in Europe combined with an active waterborne disease surveillance system in the United States has identified the Norovirus, a member of the HuCVs, as a prominent agent of waterborne disease. Current ests. suggest that upwards of 95-96% of nonbacterial gastroenteritis outbreaks of unidentified etiol. may be due to HuCV. Moreover, there were a number of documented waterborne outbreaks of Norovirus both in the United States as well as abroad. It is with the advent of advanced mol. techniques that we have begun to develop a strategy for the detection of this organism in various water matrixes. However, because HuCV have not yet been cultured in the laboratory, it is difficult to conduct research on their fate in the environment

and their removal or inactivation during water and wastewater treatment processes. Therefore, alternative approaches have included using recombinant Norwalk virus particles, indirect measures of inactivation based on mol. methods, or the culturable Feline Calicivirus as a surrogate. Results from these studies raise concerns about the mobility of HuCV in groundwater and their resistance to chlorine and monochloramine, and suggest that UV radiation may be an effective

inactivation method. Addnl. research is needed to confirm these results and the methods employed as well as to investigate other treatment processes and environmental conditions.

REFERENCE COUNT:

THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS 85 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2003:552366 CAPLUS

DOCUMENT NUMBER:

139:234871

TITLE:

Reduction of Norwalk virus, Poliovirus 1, and bacteriophage MS2 by ozone disinfection of water

AUTHOR(S):

Shin, Gwy-Am; Sobsey, Mark D.

CORPORATE SOURCE:

Department of Environmental Sciences and Engineering, University of North Carolina at Chapel Hill, Chapel

Hill, NC, 27599-7400, USA

SOURCE:

Applied and Environmental Microbiology (2003), 69(7),

3975-3978

CODEN: AEMIDF; ISSN: 0099-2240 American Society for Microbiology

DOCUMENT TYPE:

PUBLISHER:

Journal English

LANGUAGE:

AB Norwalk virus and other human caliciviruses (noroviruses) are major agents of gastroenteritis, and water is a major route of their transmission. In an effort to control Norwalk virus in drinking water, Norwalk virus reduction by bench-scale ozone disinfection was determined using quant. reverse transcription (RT)-PCR for virus assays. Two other enteric viruses, Poliovirus 1 and coliphage MS2, were included for comparison, and their redns. were assayed by infectivity assays as well as by RT-PCR. Virus redns. by ozone were determined using a dose of 0.37 mg ozone/L at pH 7 and 5° for ≤5 min. Based on two RT-PCR assays, the redns. of Norwalk virus were >3 log10 within a contact time of 10 s, and these were similar to the redns. of the other 2 viruses determined by the same assay methods. The virus redns. detected by RT-PCR assays were similar to those detected by infectivity assays, indicating that the RT-PCR assay is a reliable surrogate assay for both culturable and nonculturable viruses disinfected with ozone. Overall, the results indicate that Norwalk virus as well as other enteric viruses can be reduced rapidly and extensively by ozone disinfection and that RT-PCR is a useful surrogate assay for both culturable and nonculturable viruses disinfected with ozone.

REFERENCE COUNT:

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS 15 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

2003:542916 CAPLUS

DOCUMENT NUMBER:

139:168840

TITLE:

Molecular detection of Norwalk viruses in drinking

water by filtration-elution methods using an

alternative amino acid eluent

AUTHOR(S):

Hill, Vincent R.; Wu, Ming-Jing; Hamidjaja, Radi;

Sobsey, Mark D.

CORPORATE SOURCE:

Division of Consolidated Laboratory Services, Virginia Department of General Services, Richmond, VA, 23219,

USA

SOURCE:

Proceedings - Water Quality Technology Conference

(2002) 672-683

CODEN: PWQCD2; ISSN: 0164-0755 American Water Works Association Journal; (computer optical disk)

LANGUAGE:

PUBLISHER:

DOCUMENT TYPE:

English

Norwalk and other Noroviruses are being increasingly recognized as major contributors to the disease burden caused by contaminated water supplies. Improved methods for the detection and quantitation of these microbes in water is essential for performing disease outbreak investigations and developing monitoring strategies for management efforts

to minimize human exposures to contaminated water. Filtration-adsorption is commonly used to recover and concentrate these viruses from large vols. of water, but some research suggests that commonly-used beef extract-based filter elution solns. contain substances that inhibit reverse transcriptase-polymerase chain reaction (RT-PCR) assays for detecting these viruses. The results of this study indicate that a simple, well-defined eluent composed of L-lysine, and the detergent, Triton X-100, was an effective alternative to eluents containing beef extract No significant differences in Norwalk Virus recovery were measured between the lysineand beef extract-based eluents when virus RNA was heat-released from eluent concs. of tap water expts. When the filtration-elution method was applied to tap water seeded with approx. 103 Norwalk viruses, the lysine-based eluent was found to yield significantly greater recoveries of Norwalk viruses than 3% beef extract, 0.05 M glycine (pH 9.5). Data from filtration-elution expts. with seeded surface water also indicated that the lysine-based eluent achieved similar or greater recoveries of Norwalk viruses compared to the beef extract-based eluent. The results from this study show that a high-molar lysine eluent can be an effective alternative to beef extract eluents for detecting relatively low levels of Norwalk viruses in tap water and surface water samples.

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS 10 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

CORPORATE SOURCE:

2003:455223 CAPLUS

DOCUMENT NUMBER:

139:303662

TITLE:

Trans-activity of the norovirus Camberwell

proteinase and cleavage of the N-terminal protein

encoded by ORF1

AUTHOR (S):

Seah, Ee Ling; Marshall, John A.; Wright, Peter J.

Dept. of Microbiology, Monash Univ., Victoria, 3800,

Australia

SOURCE:

Journal of Virology (2003), 77(12), 7150-7155

CODEN: JOVIAM; ISSN: 0022-538X American Society for Microbiology

PUBLISHER: DOCUMENT TYPE:

Journal

English LANGUAGE:

The virus-encoded proteinase of Camberwell virus, a genogroup 2 norovirus, was synthesized in Escherichia coli. The purified proteinase had correct N and C termini and showed trans activity in cell-free assays. Trans activity was also demonstrated in COS cells transfected with constructs encoding either the proteinase or a proteinase-polymerase fusion. The N-terminal protein of ORF1 was cleaved in COS cells, possibly at the site E194/S.

REFERENCE COUNT:

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